shall be used for all engines regardless of the level of the NO_X FEL.

- (b) Requirements for calculating NMHC + NO_X Ĉredits from Tier 2 and later engines rated at or above 37 kW and Tier 1 and later engines rated under 37 kW and PM credits from all engines. (1) For each participating engine family, NO_x + NMHC emission credits and PM emission credits (positive or negative) are to be calculated according to one of the following equations and rounded, in accordance with ASTM E29-93a, to the nearest one-hundredth of a megagram (Mg). This procedure has been incorporated by reference (see §89.6). Consistent units are to be used throughout the equation.
- (i) For determining credit availability from all engine families generating credits:

 $\begin{array}{ll} Emission \ credits = (Std\text{-}FEL) \ \times \ (Volume) \times (AvgPR) \times (UL) \times (10^{-6}) \end{array}$

(ii) For determining credit usage for all engine families requiring credits to offset emissions in excess of the standard:

Emission credits = (Std-FEL) \times (Volume) \times (AvgPR) \times (UL) \times (10-6)

Where:

Std = the current and applicable nonroad engine emission standard, in grams per kilowatt-hour, except for PM calculations where it is the applicable nonroad engine Tier 2 PM emission standard, and except for engines rated under 19 kW where it is the applicable nonroad engine Tier 2 emission standard, in grams per kilowatt-hour. (Engines rated under 19 kW participating in the averaging and banking program provisions of §89.203(c)(3)(ii) shall use the Tier 1 standard for credit calculations.)

FEL = the family emission limit for the engine family in grams per kilowatt-hour.

Volume = the number of nonroad engines eligible to participate in the averaging, banking, and trading program within the given engine family during the model year. Engines sold to equipment or vehicle manufacturers under the provisions of §89.102(g) shall not be included in this number. Quarterly production projections are used for initial certification. Actual applicable production/sales volume is used for end-of-year compliance determination.

AvgPR = the average power rating of all of the configurations within an engine family, calculated on a sales-weighted basis, in kilowatts. UL = the useful life for the given engine family, in hours.

[63 FR 57008, Oct. 23, 1998]

§89.208 Labeling.

For all nonroad engines included in the averaging, banking, and trading programs, the family emission limits to which the engine is certified must be included on the label required in §89.110.

[63 FR 57009, Oct. 23, 1998]

§89.209 Certification.

- (a) In the application for certification a manufacturer must:
- (1) Declare its intent to include specific engine families in the averaging, banking, and trading programs.
- (2) Submit a statement that the engines for which certification is requested will not, to the best of the manufacturer's belief, cause the manufacturer to have a negative credit balance when all credits are calculated for all the manufacturer's engine families participating in the averaging, banking, and trading programs, except as allowed under §89.203(c)(3)(ii).
- (3) Declare the applicable FELs for each engine family participating in averaging, banking, and trading.
- (i) The FELs must be to the same number of significant digits as the emission standard for the applicable pollutant.
- (ii) In no case may the FEL exceed the upper limits prescribed in §89.112(d).
- (4) Indicate the projected number of credits generated/needed for this family; the projected applicable production/sales volume, by quarter; and the values required to calculate credits as given in §89.207.
- (5) Submit calculations in accordance with §89.207 of projected emission credits (positive or negative) based on quarterly production projections for each participating family.
- (6)(i) If the engine family is projected to have negative emission credits, state specifically the source (manufacturer/engine family or reserved) of the credits necessary to offset the credit deficit according to quarterly projected production, or, if the engine family is to be included in the provisions of \$89.203(c)(3)(ii), state that the engine

§89.210

family will be subject to those provisions.

- (ii) If the engine family is projected to generate credits, state specifically (manufacturer/engine family or reserved) where the quarterly projected credits will be applied.
- (b) All certificates issued are conditional upon manufacturer compliance with the provisions of this subpart both during and after the model year of production.
- (c) Failure to comply with all provisions of this subpart will be considered to be a failure to satisfy the conditions upon which the certificate was issued, and the certificate may be deemed void ab initio.
- (d) The manufacturer bears the burden of establishing to the satisfaction of the Administrator that the conditions upon which the certificate was issued were satisfied or waived.
- (e) Projected credits based on information supplied in the certification application may be used to obtain a certificate of conformity. However, any such credits may be revoked based on review of end-of-year reports, follow-up audits, and any other verification steps deemed appropriate by the Administrator.

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57009, Oct. 23, 1998]

§89.210 Maintenance of records.

- (a) The manufacturer of any nonroad engine that is certified under the averaging, banking, and trading program must establish, maintain, and retain the following adequately organized and indexed records for each such engine produced:
 - (1) EPA engine family;
 - (2) Engine identification number;
 - (3) Engine model year and build date,
 - (4) Power rating;
 - (5) Purchaser and destination; and
 - (6) Assembly plant.
- (b) The manufacturer of any nonroad engine family that is certified under the averaging, banking, and trading programs must establish, maintain, and retain the following adequately organized and indexed records for each such family:
 - (1) EPA engine family;
 - (2) Family emission limits (FEL);

- (3) Power rating for each configuration tested;
- (4) Projected applicable production/ sales volume for the model year; and
- (5) Actual applicable production/sales volume for the model year.
- (c) Any manufacturer producing an engine family participating in trading reserved credits must maintain the following records on a quarterly basis for each engine family in the trading program:
 - (1) The engine family;
- (2) The actual quarterly and cumulative applicable production/sales volume:
- (3) The values required to calculate credits as given in §89.207;
- (4) The resulting type and number of credits generated/required;
- (5) How and where credit surpluses are dispersed; and
- (6) How and through what means credit deficits are met.
- (d) The manufacturer must retain all records required to be maintained under this section for a period of eight years from the due date for the end-of-model-year report. Records may be retained as hard copy or reduced to microfilm, ADP diskettes, and so forth, depending on the manufacturer's record retention procedure; provided, that in every case all information contained in the hard copy is retained.
- (e) Nothing in this section limits the Administrator's discretion in requiring the manufacturer to retain additional records or submit information not specifically required by this section.
- (f) Pursuant to a request made by the Administrator, the manufacturer must submit to the Administrator the information that the manufacturer is required to retain.
- (g) EPA may void ab initio under \$89.126(c) a certificate of conformity for an engine family for which the manufacturer fails to retain the records required in this section or to provide such information to the Administrator upon request.

[59 FR 31335, June 17, 1994. Redesignated and amended at 63 FR 56995, 57009, Oct. 23, 1998]

$\S 89.211$ End-of-year and final reports.

(a) End-of-year and final reports must indicate the engine family, the